## Claim Listing

The following listing of claims, if entered, replaces all previous versions of the claims.

1. (Currently Amended) A method for maintaining a unique session ID in a network, comprising:

creating a unique session identifier for a user, wherein

the unique session identifier is unique with respect to a plurality of network access servers; and

providing the unique session identifier to [[a]] an Authentication, Authorization, and

Accounting (AAA) software module that provides for performing authentication,
wherein

each of the network access servers is configured to request AAA processing from the AAA module.

- 2. (Currently Amended) The method recited in Claim 1, wherein:
  the creating [[a]] the unique session identifier further comprises appending a unique identifier associated with an access server to a local session identifier,
  the unique identifier is associated with one of the network access servers, and
  the one of the network access servers generates the unique session identifier.
- 3. (Original) The method recited in Claim 2, wherein: the unique identifier is an IP address.
- 4. (Original) The method recited in Claim 1, further comprising: providing the unique session identifier to an off-load server.
- 5. (Currently Amended) The method recited in Claim 1, wherein: creating a unique session identifier further comprises creating a unique session identifier for each of the a plurality of network access servers.

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6. (Currently Amended) A system, comprising:

- a network access server, the network access server being associated with a corresponding unique identifier;
- wherein the network access server is configured to generate a <u>unique corresponding local</u> session identifier <u>for a user;</u> and
- wherein the unique session identifier is unique with respect to a plurality of network access servers,
- wherein the plurality of network access servers include the network access server;
  wherein the network access server is configured to provide the unique session identifier
  to an AAA module; and
- wherein the AAA module performs AAA processing for each of the plurality of network access servers
- wherein the network server is further configured to generate a corresponding unique session identifier.
- 7. (Currently Amended) The system recited in Claim 6, wherein: the network access server is associated with the unique identifier is an IP address; and the unique session identifier comprises the IP address.
- 8. (Currently Amended) The system recited in Claim 6, wherein further comprising: the network access server is one of a plurality of network access servers; wherein each of the plurality of network access servers is configured to generate a corresponding local session identifier; and
- each of the plurality of network servers is further configured to generate a corresponding unique session identifier.
- 9. (Currently Amended) The system recited in Claim 6, further comprising: an off-load server, the off-load server being coupled to receive the corresponding unique session identifier from the network access server.
- 10. (Currently Amended) The system recited in Claim 9, wherein:
- the off-load server is configured to provide the corresponding unique session identifier to

  the AAA module a software module that is configured to perform accounting processing.

- 11. (Currently Amended) The system recited in Claim 9, wherein:
- the off-load server is configured to provide the corresponding unique session identifier to a software the AAA module, and

the AAA module that is configured to perform port counting.

- 12. (Currently Amended) The system recited in Claim 6, further comprising:
- a software module that is configured to perform the AAA module authentication, the

  AAA software module being further configured to receive the corresponding unique session identifier from the network access server.
- 13. (Currently Amended) The system recited in Claim 6, wherein:
- the network access server is further configured to generate the corresponding unique session identifier by appending an the unique-IP address of the network access server with to a the local session identifier.
- 14. (Currently Amended) The system recited in Claim 9, wherein:
- the off-load server is further configured to generate a start record, the off-load server being further configured to associate the start record with the corresponding unique session identifier; and
- the off-load server is further configured to provide the start record to the AAA -a software module that provides for performing accounting processing.
- 15. (Currently Amended) The system recited in Claim 9, further wherein:
- the off-load server is further configured to generate a stop record, the off-load server being further configured to associate the stop record with the eorresponding unique session identifier; and
- the off-load server is further configured to provide the stop record to the AAA a software module that provides for performing accounting processing.
- 16. (Currently Amended) An apparatus, comprising:

means for creating a unique session identifier for a user, wherein

the unique session identifier is unique with respect to a plurality of network access servers; and

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- means for providing the unique session identifier to an AAA a software-module that

  provides for performing authentication, wherein

  each of the network access servers is configured to request AAA processing from the AAA module.
- 17. (Currently Amended) The apparatus recited in Claim 16, wherein: means for creating a unique session identifier further comprises means for appending a unique identifier associated with a network the access server to a local session identifier.
- 18. (Original) The apparatus recited in Claim 17 wherein: the unique identifier is an IP address.
- 19. (Original) The apparatus recited in Claim 16, further comprising: means for providing the unique session identifier to an off-load server.
- 20. (Currently Amended) The apparatus recited in Claim 16, wherein: means for creating a unique session identifier further comprises means for creating a unique session identifier for each of the a plurality of network access devices.
- 21. (Currently Amended) A computer program product, encoded in computer readable media, comprising:
  - a first set of instructions, executable on a computer system, configured to create a unique session identifier for a user, wherein
    - the unique session identifier is unique with respect to a plurality of network access servers; and
  - a second set of instructions, executable on a computer system, configured to provide the unique session identifier to an AAA a software module that provides for performing authentication, wherein
    - each of the network access servers is configured to request AAA processing from the AAA module.

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22. (Currently Amended) The computer program product of Claim 21, encoded in computer readable media, wherein:

the first set of instructions, executable on a computer system, is further configured to append a unique identifier associated with an access server one of the network access servers to a local session identifier.

23. (Original) The computer program product of Claim 21, encoded in computer readable media, wherein:

the unique identifier is an IP address.

- 24. (Currently Amended) The computer program product of Claim 21, encoded in computer readable media, further comprising:
  - a <u>third</u> second set of instructions, executable on a computer system configured to provide the unique session identifier to an off-load server.
- 25. (Currently Amended) The computer program product of Claim 21, encoded in computer readable media, wherein:

the first set of instructions, executable on a computer system, is further configured to create a unique session identifier for each of the a plurality of network access servers.

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